CONSTRUCTION ENGINEERING AND INSPECTION SERVICES March 17, 2006

STATE PROJECT NO. 700-99-0393 (Alternate 1A) FEDERAL AID PROJECT NO. ER-ERP1(017) I-10 BRIDGE OVER LAKE PONTCHARTRAIN ROUTE I-10 ORLEANS AND ST. TAMMANY PARISHES

Under Authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues a Request for Qualification Statements (RFQ) on Standard Form 24-102 (SF 24-102), "Professional Engineering and Related Services", revised January 2003, from Consulting Firms (Consultant) to perform all construction engineering and inspection services required for the subject project. All requirements of the Louisiana Professional Engineering and Land Surveying (LAPELS) Board must be met prior to the execution of the contract. One Prime-Consultant/Sub-Consultant(s) (Consultant/Team) will be selected for this Contract.

DOTD Coordinator – Mr. Brian Buckel may be reached at (504) 437-3103.

PROJECT DESCRIPTION

The Consultant/Team will be required to provide construction contract administration and construction engineering inspection services (CE&I) for the I-10 Bridge over Lake Pontchartrain. This contract will be for CE&I services needed for two separate construction projects under Alternate 1A (precast concrete beams with a cast-in-place deck), if any or both are awarded with this Alternate. The letting for the first and second contracts are scheduled for April and September of 2006, respectively. The anticipated date for the Notice to Proceed (NTP) for the first construction contract is April 24, 2006. This contract will be awarded only if Alternate 1A is awarded under the construction contract. State Projects No. 450-17-0025 and 450-18-0100 and Federal Aid Projects No. ER-3605(524) and ER-5205(514) have been assigned to identify the construction projects.

SCOPE OF SERVICES

The selected Consultant/Team will provide the construction contract administration and construction inspection services required to build a new bridge and approach roadway structures on I-10 over Lake Pontchartrain in Orleans and St. Tammany Parishes. The new bridge structures total 3,752,465 square feet of bridge.

• Construction Contract No. 1 contains 2,860,729 square feet of bridge with many repetitive I-beam concrete spans. This contract will contain the entire test pile program for this project.

• Construction Contract No. 2 will contain 891,736 square feet of bridge including the main navigation channel spans. This contract will also contain the task of the demolition of the existing bridges.

Both contracts contain significant roadway work, permanent and temporary signing, emergency cross over spans and gates, girders, navigational lighting, the framework for ITS operations, establishment of electrical power and fiber optics for the entire length of the project, and provisions for future lighting and additional conduits for future needs. The new bridge structure will be built on an off-set alignment parallel to the existing bridge, so that existing vehicular traffic can be maintained during construction. The new bridge will consist of twin parallel bridges each consisting of three 12 foot travel lanes and two 12 foot shoulders. The services will be performed in accordance with DOTD's Standards and Procedures (see References). Copies of these documents will be made available through DOTD upon request. The Consultant/Team will be required to provide assistance and data to the DOTD as called for by the SAFETEA-LU guidelines, including but not limited to Financial Plan and Project Management yearly updates. The DOTD will assign a project coordinator from its District (02) Office to serve as a construction coordinator for the DOTD during project construction.

The following inspection services to be performed by the Consultant will be under the direct supervision of the DOTD Coordinator.

- 1. Coordinate with DOTD District personnel to schedule and attend the Preconstruction Meeting. Consultant will be required to conduct the meeting.
- 2. Maintain all construction field records; make daily entries in the project diary to indicate the Consultant's personnel and Contractor's personnel present on the job site, the Contractor's personnel and equipment being utilized on the project, the work being accepted, the acceptability of traffic control, and the charging of contract time through the Site Manager.
- 3. Coordinate with the Parish Engineers/Representatives for all relocations/adjustments of utility facilities for the construction of work site.
- 4. Provide all necessary personnel and equipment, or coordinate the activities of the selected testing laboratory to perform the required field-testing for quality assurance in accordance with the latest DOTD Sampling and Testing Manual.
- **Collect and** submit all sampled materials to be tested by DOTD District Testing Laboratories, in accordance with the stipulated Sampling Manual.
- 6. Inspect the contractor's construction operations (daily) to ensure that all work is performed in accordance with the specified plans and specifications.
- 7. Keep clear and concise records of the contractual operations, prepare monthly pay estimates, and make monthly progress reports in conformance with DOTD requirements. Inspection of construction will not include shop and mill inspections and their approval.
- 8. Prepare final estimate packages, including Form 2059 "Summary of Test Results" in conformance with DOTD requirements.
- 9. Review all form work drawings and submit to DOTD for further handling, review, and distribution.

- 10. All construction activities shall be coordinated between the Consultant, the Owner, the FHWA and an assigned representative of the DOTD. All work standards, methods of reporting, and documentation of pay quantities will be in accordance with the policies and procedures of the DOTD. All partial and final construction estimates, and other information must be submitted on forms approved by the DOTD.
- 11. The Consultant will be available for conferences, visits to jobsites, and/or inspections by DOTD authorized representatives.
- 12. The Consultant will be required to submit "As-Built" plans with the final estimate. "As-Built" plans are to reflect all changes made from the original plans. All changes to the plans are to be made using a 746-1/2 Tuscan red pencil.
- 13. When it is stipulated by the Project Specifications, that approval by DOTD is required for material, equipment, and/or construction procedures, DOTD policies for obtaining such approval will be followed.
- 14. All construction inspection personnel utilized by the Consultant must meet and retain the same qualification and certification requirements as required of DOTD construction personnel.
- 15. The Contractor will perform construction layout, and the Consultant will perform, or hire a licensed surveyor to perform, any necessary spot checks for verification. All surveying must be in accordance with the requirement of LAPELS.
- 16. Any proposed changes in plans or in the nature of the work will be pre-approved in writing by the DOTD, prior to the performance of stipulated work.
- 17. Plan changes throughout the life of the project will also have to be written by the Consultant and approved through the Department's process.
- 18. The Consultant will monitor and document all construction claims, and provide recommendations on disposition of claims.
- 19. The Consultant will be required to perform record keeping on Site Manager.
- 20. Provide permeability testing in accordance with AASHTO T-277 (ASTM C 1202). The selected laboratory must meet the AASHTO Material Reference Laboratory (AMRL) requirements.

The following inspection services will be performed for fabrication at the Precast/Prestressed Concrete Plant under the direct supervision of the Fabrication Engineer.

- 1) Check steam recorders with hand thermometer. Witness the breaking of cylinders, (release and 28 day) and the de-tension of members
- 2) Inspect the loading of trucks and stamp members for shipping and write up release to project engineer, also draw up checkout sheet off of approved shop drawings and head up field books for production.
- Inspect batch plant for cleanliness and good operation (no leakage or dusting) Check gravel and sand for proper storage (no standing water or trash). Witness the moisture and gradations test being performed by the contractor. Also check storage area where stockpile material may be stored improperly.
- 4) Check to see that all material being used has been sampled and approved. Sample incoming material (strand, admix, hardware, bearing pads). Track all material that

- is allowed by QPL approval such as rebar, cement, form oil, and patching material.
- 5) Inspect piling or girder bed for alignment, level, form oil and cleanliness.
- 6) Inspect the pours that were fabricated the day before (measure length, inserts, diaphragm holes, steel projection, end dam bolts, sweep and over all appearance) Also approve any repair if necessary.
- 7) Witness all stressing operations, measure drape height, elongation, hold down positions and record each strand load, reel numbers and heat number in field book.
- 8) Inspect steel placement, measure diaphragm and length of girder, check header for plum and square, or spiral spacing if member requires before setting side forms and approving line for pouring. See that side forms or clean and have been adjusted properly to produce a good member.
- 9) Inspect the pouring operations, make test cylinders and perform slump test.
- **Inspect and ensure** that members are covered for curing with good tarps (no holes) and that steam clocks are in good working order.

NOTES:

- 1) For a Prestressed Plant to produce a line of girders everyday, steps 5, 6 and 7 must be completed the day before.
- 2) The above steps may be performed simultaneously.
- 3) Steps 5 thru 10 are repeated for each line produced.

ITEMS AND SERVICES TO BE PROVIDED BY THE DOTD

The DOTD will furnish, without charge, the following services and data:

- 1) DOTD Structural/Marine Fabrication Engineer will retain oversight of all shop and fabrication inspection.
- 2) Review of Steel Plate Girders and AASHTO concrete girders shop drawings generated by the Contractors.
- Laboratory testing of materials. DOTD District 02 Testing Laboratory in Jefferson Parish and/or District 62 Testing Laboratory in Tangipahoa Parish will perform laboratory tests in conjunction with specialty testing performed at the DOTD Central Laboratory in Baton Rouge, Louisiana, using samples procured, and submitted by the Consultant and/or his staff.
- 4) DOTD will provide Project Plans, Specifications, Special Provisions, Design Criteria, Contract Proposal, and Advanced Test Pile Program Report, Boring data and CPT data, and pile order length.
- 5) DOTD will perform quality acceptance verification measure for the permeability testing.
- 6) Review of electrical and mechanical shop drawing generated by the Contractor.

REFERENCES

All services and documents will meet the standard requirements as to format and content of the DOTD; and will be prepared in accordance with the latest applicable editions, supplements and revisions of the following:

- 1. AASHTO Standards, ASTM Standards or DOTD Test Procedures
- 2. DOTD Location and Survey Manual
- 3. DOTD Roadway Design Procedures and Details
- 4. DOTD Hydraulics Manual
- 5. DOTD Standard Specifications for Roads and Bridges
- 6. Manual of Uniform Traffic Control Devices (2003 Edition)
- 7. DOTD Traffic Signal Design Manual
- 8. National Environmental Policy Act (NEPA)
- 9. National Electric Safety Code
- 10. National Electric Code (NFPA 70)
- 11. DOTD Environmental Impact Procedures (Vols. I-III)
- 12. Policy on Geometric Design of Highways and Streets
- 13. Construction Contract Administration Manual
- 14. Materials Sampling Manual
- 15. DOTD Bridge Design Manual
- 16. Consultant Contract Services Manual
- 17. Geotechnical Engineering Services Document
- 18. Bridge Inspectors Reference Manual, October 2002

COMPENSATION

Compensation to the Consultant for services rendered in connection with this Contract will be made on the basis of actual cost (subject to DOTD maximum limitations) plus a negotiated fixed fee, with a maximum limitation as established by DOTD.

The selected Consultant/Team will be required to submit a proposal within 14 calendar days following the notification of selection. All negotiations must be completed within 30 calendar days following the notification of selection.

CONTRACT TIME

The services to be performed under this contract will commence promptly upon receipt of the written NTP from DOTD's Consultant Contract Services Section, and will be in effect for the duration of 60 months. The delivery schedule for all project deliverables will be established by the Project Coordinator.

MINIMUM PERSONNEL REQUIREMENTS

The following requirements must be met by the Prime-Consultant at the time of submittal:

- 1. At least one Principal of the Prime-Consultant must be a Professional Civil Engineer Registered in the State of Louisiana.
- 2. The Prime-Consultant must employ on a full-time basis, four Professional Civil Engineers registered in the State of Louisiana.
- 3. The Prime-Consultant must employ on a full-time basis a minimum of seven of the 16 following inspectors. All inspectors must inspect appropriate corresponding activities. A construction inspector can be substituted for a Certified Inspector when a required certification is held by another inspector with multiple certifications.
 - a) Four DOTD Certified Structural Concrete Inspectors with a minimum of five years of inspection experience in construction of roads and bridges.
 - b) One DOTD Certified Asphalt Paving Inspector with a minimum of five years of inspection experience in construction of roads and bridges.
 - c) One DOTD Certified Embankment and Base Course Inspector with a minimum of five years of inspection experience in road and bridge construction.
 - d) One Asphalt Plant Inspector with a minimum of five years of inspection experience in Asphalt Plants.
 - e) Two American Concrete Institute (ACI) Certified Inspectors with a minimum of five years of inspection experience in road and bridge construction.
 - f) Seven construction inspectors.
- 4. In addition to the above requirements, the Prime-Consultant must employ on a full-time basis, or through the use of a Sub-Consultant(s):
 - a) One Professional Civil Engineer registered in the State of Louisiana with at least ten years of experience in construction of roads and bridges, including major bridge structure and substructure, as the Resident Engineer.
 - b) One Professional Civil Engineer registered in the State of Louisiana with at least five years of experience in construction of roads and bridges, including major bridge structure and substructure, as the Assistant Resident Engineer.
 - c) Two Inspectors with Certification of the National Electric Code (Latest edition) with a minimum of four years of experience in government, industrial, and commercial installations. At least one of the Inspectors must have experience as a communications/ITS Inspector and have inspection experience of fiber communications and RF devices.
 - d) Other nine remaining inspectors required under Item 3.

EVALUATION CRITERIA

The general criteria to be used by DOTD in evaluating responses for the selection of a Consultant to perform these services are:

1. Consultant's firm experience on similar projects, weighting factor of 3;

- 2. Consultant's personnel experience on similar projects, weighting factor of 4;
- 3. Consultant's firm size as related to the estimated project cost, weighting factor of 3;
- 4. Consultant's past performance on similar DOTD projects, weighting factor of 6;
- 5. Consultant's current work load, weighting factor of 5;
- 6. Location where the work will be performed, weighting factor of 4.
- 7. Consultant's Interview/Presentation.

All Consultants/Teams will be evaluated as indicated in Items 1-6. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of 0-4. The rating will then be multiplied by the corresponding weighting factor. The firm's ratings in each category will be added to arrive at the total Consultant's rating. If Sub-Consultants are used, each member of the Consultant/Team will also be evaluated as indicated in Items 1-6. The individual team member rating for their part of the contract proportional to the amount of their work will then be added to arrive at the TIER I Consultant/Team final rating.

The Consultants/Teams on the TIER I short-list of the three (if three are qualified) highest rated Consultant/Teams will be asked to attend an Interview/Presentation (Item 7) scheduled for Wednesday, April 19, 2006 in the 3rd floor classroom, after the announcement of the alphabetical TIER I short-list. During the presentations each Consultant/Team will be given 40 minutes for the Presentation/Interviews and an additional 20 minutes to answer any questions. The schedule of Presentation/Interviews will be announced at the time of the announcement of the alphabetical TIER I short-list.

The Consultant's Interviews/Presentations (Item 7) will be used to develop the ranked TIER II short-list based on an adjectival rating procedure. The TIER I ranking will not be a part of the ranking for the TIER II short-list. The ranked TIER II short-list of the three (if three are qualified) Consultant/Teams will be submitted to the Secretary of the DOTD. The Secretary will make the final selection. DOTD's Consultant Evaluation Committee will be responsible for performing the above described evaluation and preparation of the TIER I and TIER II short-lists.

CONTRACT REQUIREMENTS

The selected Consultant will be required to execute the contract within 10 days after receipt of the contract.

INSURANCE - During the term of this contract, the Consultant will carry professional liability insurance in the amount of \$2,000,000. The Prime-Consultant may require the Sub-Consultant(s) to carry professional liability insurance. This insurance will be written on a "claims-made" basis. Prior to executing the contract, the Consultant will provide a Certificate of Insurance to DOTD showing evidence of such professional liability insurance.

AUDIT - The selected Consultant/Team will allow the DOTD Audit Section to perform an annual overhead audit of their books, or provide an *independent* Certified Public

Accountant (CPA) audited overhead rate. This rate must be developed using Federal Acquisition Regulations (FAR) and guidelines provided by the DOTD Audit Section. In addition, the Consultant/Team will submit semi-annual labor rate information, when requested by DOTD.

The selected Consultant/Team will maintain an approved Project Cost System, and segregate direct from indirect cost in their General Ledger. Pre-award and post audits, as well as interim audits, may be required. For audit purposes, the selected Consultant/Team will maintain accounting records for a minimum of five years after final contract payment.

Any Consultant currently under contract with the DOTD and who has not met all the audit requirements documented in the manual and/or notices posted on the DOTD Consultant Contract Services Website (www.dotd.louisiana.gov), will not be considered for this project.

SUBMITTAL REQUIREMENTS

One original (stamped original) and four copies of the SF 24-102 must be submitted to DOTD. Copies of Inspectors' certification cards (indicating the date of expiration), must be included in the SF 24-102. All submittals must be in accordance with the requirements of this advertisement and the Consultant Contract Services Manual. Any Consultant/Team failing to submit any of the information required on the SF 24-102, or providing inaccurate information on the SF 24-102, will be considered non-responsive.

Any Sub-Consultants to be used, including Disadvantaged Business Enterprise (DBE) Sub-Consultants, in performance of this contract, must also submit a SF 24-102, completely filled out and containing information pertinent to the work to be performed. The Sub-Consultant's SF 24-102 must be firmly bound to the Consultant's SF 24-102. In Section 9, the Consultant's SF 24-102 must describe the **work elements** to be performed by the Sub-Consultant(s), and state the approximate **percentage** of each work element to be subcontracted to each Sub-Consultant.

Name(s) of the Consultant/Team listed on the SF 24-102, must precisely match the name(s) filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors.

The SF 24-102 will be identified with State Project No. 700-99-0393 (Alternate 1A), and will be submitted **prior to 3:00 p.m. CST** on **Monday, April 10, 2006**, by hand delivery or mail, addressed to:

Department of Transportation and Development Attn.: Dr. Babak Naghavi, P.E., P.H. Consultant Contract Services Administrator 1201 Capitol Access Road, **Room 405-T** Baton Rouge, LA 70802-4438 or Post Office Box 94245

Baton Rouge, Louisiana 70804-9245

Telephone: (225) 379-1989

REVISIONS TO THE RFQ

DOTD reserves the right to revise any part of the RFQ by issuing an addendum to the RFQ at any time. Issuance of this RFQ in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all Qualification Statements submitted, and/or cancel this announcement if it is determined to be in DOTD's best interest. All materials submitted in response to this announcement become the property of DOTD, and selection or rejection of a submittal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the RFQ.